

ECONOMIC INFORMATION:

**Sources, Use and
Effectiveness in**

Farm Production Adjustment

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CONTENTS

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| | |
|------------------------------------|---|
| Summary | 3 |
| Conclusions | 4 |
| Introduction | 6 |
| Definition of Terms | 7 |
| Specific Objectives of Study | 7 |
| Method of Study | 8 |

SECTION I

| | |
|---|----|
| Sources of Economic Information | 10 |
| Inventory of Sources of Economic Information | 10 |
| College, Experiment Station, and U. S. D. A. Publications | 10 |
| Farm Papers and Farm Magazines | 10 |
| Business Service Reports and News Letters | 10 |
| Daily Newspapers | 10 |
| Radio and Television | 11 |
| Miscellaneous Sources | 11 |
| Basic Sources of Disseminating Media | 11 |
| Sources of Economic Information Received by Farmers | 11 |
| Sources of Economic Information Used by Farmers | 12 |
| Sources of Economic Information Preferred by Farmers | 12 |
| Summary of Sources | 13 |
| Factors Other Than Price Influencing Enterprise Size | 14 |
| Factors Influencing Dairyman to Change Enterprise Size | 15 |
| Factors Influencing Swine Producers to Change Enterprise Size | 15 |
| Factors Influencing Corn Producers to Change Enterprise Size | 16 |
| Price as a Factor Influencing Enterprise Size | 16 |
| Effect of Price Change Upon Dairy Herd Size | 16 |
| Effect of Price Change Upon Herd Size of Swine Producers | 17 |
| Effect of Price Change Upon Corn Acreage | 18 |
| Effect of Price Change Upon Enterprise Size of All Producers | 19 |
| Dairy Farmer Knowledge of and Reaction to Price Expectations | 21 |
| Swine Farmer Knowledge of and Reaction to Price Expectations | 22 |
| Corn Farmer Knowledge of and Reaction to Price Expectations | 22 |

SECTION II

| | |
|---|----|
| Effects of Providing Added Information to Farmers | 23 |
| Effect of Added Information Upon Price Expectations | 23 |
| Sources of Information Preferred | 24 |
| Effect of Added Information Upon Enterprise Size | 25 |
| Farmer Reaction to Controls of Production | 26 |

ECONOMIC INFORMATION: SOURCES, USE, AND EFFECTIVENESS IN FARM PRODUCTION ADJUSTMENT

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SUMMARY

1. Farm papers and magazines are the most important source of economic information of farmers. More farmers use them than use any other source. Also, more farmers prefer them as a source of information than prefer any other source.

2. Relatively few farmers directly use the media of college and extension service publications as a source of economic information. Recipients of such publications are generally characterized as being larger farm operators, more highly educated, participating in more farm organizations, and in addition more of them are full-time farmers.

3. College and extension service publications are a "favorite" source of economic information of more farmers than the number who listed them as actual sources; hence, such publications may not be utilized to their full potential.

4. Daily newspapers, television and radio are common to a large percentage of farmers. However, they are not popular with farmers as sources of economic information. They were given as first choice of such information by only four to six percent of the farmers. This results at least in part from the fact that only a limited amount of economic information is disseminated by these media.

5. More than 80 percent of the farmers who had changed business size in a two-year period listed factors other than price change as a main reason. Price changes within this period, however, generally had not been great. Such changes as labor supply, amount of feed on hand and culmination of an expansion begun earlier seemed to be of much greater influence in causing farmers to change the size of their major livestock enterprise than did price changes.

6. Decisions regarding enterprise size were influenced by factors of long-run importance, "natural expansion" being a common reason given for changing size. An example of this type of response is "heifers coming fresh and being added to the herd." This indicates partial culmination of plans that probably began years before.

7. The two major factors influencing corn producers to change enterprise size in a two-year period were field size in rotations and government programs. Rotation was the most common reason given in spite of the fact that only those farmers responded who grew corn as a major source of gross cash income.

8. Many more farmers believed their major enterprise size should be larger for maximum farm income than believed it should be cut back. Slightly over one-half the dairymen and over one-third of the corn and swine producers indicated need for increasing size while no more than five percent of any of these producers believed their size of business should be decreased.

9. Most farmers indicated they had heard or read about expected future price for their major commodity at the time they were making production decisions. As many as 80 percent, if they chose, could have responded to an expected price. Only slight production response to changed price expectation was indicated.

10. When asked the hypothetical question concerning action which they would take regarding size of business if prices were to change significantly, nearly two-thirds of the farmers indicated they would make no change in enterprise size. Of those who would change size the number who indicated an upward response to an increased price was much greater than the number who indicated a downward response to an expected price drop.

11. "Exposing" a group of farmers to more economic information for a period of one year did not appreciably change attitudes and practices concerning decisions regarding business size. It is recognized, however, that a period of one year is a relatively short one in which to measure changes in attitudes. Also, the degree of differences in amount of information received by the two groups may have been quite small.

12. Most farmers indicated they would not favor effective production controls even when general farm prices are at a relatively low level.

CONCLUSIONS

1. Many farmers receive enough sources of economic information of a short-run nature that they could become reasonably well informed about trends and short-time price expectations. This is evidenced partly by the fact that 85 percent of the farmers reported receiving one farm paper and 84 percent received another farm paper, both of which carry such information.

2. There are several sources of economic information not being used by many farmers. Many business letters and service reports are specifically designed to keep farmers informed about economic conditions but a small percentage of the farmers are receiving most of them.
3. Economists might increase their over-all effectiveness if they would make an effort to utilize the medium of farm papers to a larger extent in the dissemination of information.
4. It might be well to give consideration to means of making college and extension service publications available to more farm people.
5. Farmers should be given intensive instruction as to how they can most effectively use economic information. Cost of many publications specifically carrying such information is small.
6. Price information of the type received by farmers does not seem effective in helping farmers adjust business size. Casual observation of the media indicates that most price information is short run in nature. Very frequently little attention is given to commodity outlook for more than six months into the future. Quite likely there is much value in collecting and disseminating such information but it is doubtful if much of this value lies in helping farmers make adjustments in their size of enterprise. The fact that only those enterprises were studied which provided the major source of gross cash income makes this conclusion even more significant.
7. One or both of two factors appear to partially explain why relatively few farmers change production plans as a result of expected price changes. First is the fact that many farmers indicated they currently were not operating at optimum levels. To these farmers a drop in price may serve to add more pressure to become more efficient. In many instances a lower price would cause increased rather than decreased volume. The second factor is that alternative opportunities, especially in the short-run, are limited. This becomes especially important as farmers specialize and become heavily capitalized in certain enterprises.
8. It would seem that more concentrated effort should be made by both federal and state economists to try to project economic information as far into the future as it takes to completely bring an alternative opportunity into complete production. Such longer-term analysis would be more difficult than making a short-run analysis. Conditions upon which assumptions are based often

would change. In some cases it would mean analyzing and forecasting for a period of four to six years into the future. Attaining the highest possible degree of accuracy would become of primary importance in such forecasts. Longer-time analysis should be of considerable help to those who are working in "farm and home planning" programs of the agricultural extension service. Here emphasis is placed upon helping farmers plan their farm business on a long-time basis. In actual practice these decisions by farmers frequently are being made without benefit of critical analysis in how the relationship between alternative opportunities may change over a period of years. Therefore, any information of this nature should prove helpful.

9. Along with the above recommendations would need to be an intensive training of farmers as to how they can profitably use economic information in making production decisions. Also they would need to understand that longer-time outlook might change as conditions changed. More training would be needed in helping farmers to evaluate the function of price and other factors which influence business size.

INTRODUCTION

Production adjustments in agriculture are continually taking place. The question of effectiveness of economic information in helping to bring about these adjustments has been raised by farmers, economists, and others. During the past 30 years more and more attention has been given to collecting economic information and presenting it to farmers.

In this period two sharply conflicting points of view emerged. One holds that if farmers are given adequate economic information they will make sound adjustments regarding enterprise size and will enhance their well-being. Another point of view maintains that low farm prices are evidence that satisfactory farm adjustments are not being made. Those holding the latter view insist that a more direct means of production adjustment is necessary.

Economic information has many uses other than in making farm enterprise size adjustments. It may be used by farmers in determining certain buying decisions, by farm marketing agencies, by government agencies, by non farm groups serving farm people and others. Any of the above uses and perhaps others would justify collecting and dissemination of information. This study, however, attempts to look at the importance of such information in making adjustments in farm enterprise size.

DEFINITION OF TERMS

Certain terms and concepts used in the analysis are mentioned here:

Economic information in general refers to data available to farmers which deal with supply, demand and price (including costs).

Outlook information in general is synonymous with economic information projected into the future. To illustrate what we consider outlook information: One farmer may have produced hogs because he did last year or because his labor supply was at a certain level; another farmer may have figured expected supply, demand and price trends and thus came to the conclusion hogs would be more profitable; a third farmer may have based his decision upon current price for his product. In this study the latter two would be said to have used economic or outlook information as a basis for making their decisions, while the first one had not. The third farmer made his own "forecast" from current information.

Although this study attempts to look at both the current and outlook aspects of economic information, there frequently may not be a fine line of distinction drawn between them. Also since costs did not show great change during the time of this study, most emphasis was placed upon price changes as they affected certain farm decisions.

Major enterprise in this study refers to that enterprise which provides the largest source of gross cash income to the farmer. Whenever reference is made to swine producers, dairy producers or corn producers it relates to those whose largest enterprise was swine, dairy or corn.

Production adjustments in this study deal primarily with changes in size of major enterprise.

Enterprise size refers to "number" of livestock and "acres" of crops.

SPECIFIC OBJECTIVES OF STUDY

The general aim of the study was to determine some of the forces which affect certain short-time production decisions of farmers with specific emphasis upon the value of economic information in making these decisions. More specific objectives included:

1. To itemize and evaluate major sources of economic information currently used by farmers.

2. To delineate some factors other than price which seem important to farmers in making adjustments in size of enterprise.
3. To determine the effect of price change upon enterprise size of farmers.
4. To evaluate the effect of making added economic information available to farmers upon certain attitudes and decisions regarding enterprise size.

METHOD OF STUDY

This study was divided into two major phases. The first was concerned with accumulating data relating to the first three objectives mentioned above. The second phase involved making additional economic information available to one group of farmers while not making it available to another group. The general question to be answered was "Does added information cause farmers to react differently regarding certain economic decisions, particularly as they relate to enterprise size?"

Teachers of vocational agriculture made the contacts with farmers. Teachers work with specific groups and they make farmer contacts rather easily. They would be able to provide professional help in obtaining cooperation of farmers. People with whom the teachers work might be divided into two distinct groups to be supplied or not supplied with economic information.

In the groups with whom teachers work most closely there would be a certain lack of "randomness." It was felt, however, that this lack of randomness would not be a major obstacle. The study concerned mainly farmers whose decisions were influenced by economic factors.

Selection of teachers was based upon location in the state, convenience, size of classes, efficiency of the teacher, and his willingness to cooperate in the study. The response by teachers was excellent. The State Department of Vocational Agriculture in Ohio and the Department of Agricultural Education at the Ohio State University helped select the teachers.

The groups which provided information were composed of about one-half (55 percent) parents of all day students of vocational agriculture and about one-half (45 percent) members of evening adult farmer classes. If a farmer was both a parent of a vocational agricultural student and a member of an evening adult class he was counted only in the latter group.

Most of the analysis was made after combining data from parents of students and evening adult class members. Although there were some differences in the two groups regarding size of business, education, size of farms, part-time employment and age, it was felt that these differences were not great enough to warrant concentrating the analysis entirely on either group.

In the first phase of the study questionnaires were sent to all those selected from both groups and responses were obtained from 785 farmers. Teachers helped in obtaining responses within their departments.

In phase two of the study participants from one-half of the departments of vocational agriculture were designated to receive added quantities of economic information for a period of one year. In the other one-half of the departments no specific emphasis was placed upon providing participants with such information. No attempt was made to prevent them from receiving economic information which they normally had been receiving.

Each person from the group which received added information (from now on called the "outlook" group) received the following outlook information: the monthly extension service publication dealing with current problems in economics called **Timely Economic Information for Ohio Farmers** and the weekly one page extension service publication called "Econogram", which gives current economic information and expected trends in agricultural supply, demand and prices.

Each person in the "outlook" group periodically received special mimeographed releases prepared by agricultural economists at the Ohio State University. These dealt specifically and in some detail with the situation and outlook for particular agricultural enterprises.

An outlook meeting was made available to those in the "outlook" group. Either an extension agricultural economist or the local teacher of vocational agriculture conducted the outlook meeting.

After one year of this concentrated effort with one group a second survey measured changes in certain attitudes and practices. It was recognized that actual differences in the amount of information received by the two groups may have been small.

SECTION I

SOURCES OF ECONOMIC INFORMATION

INVENTORY OF SOURCES OF ECONOMIC INFORMATION

Farmers have access to a great many sources of economic information. Publications of colleges of agriculture, agricultural experiment stations, the Agricultural Extension Service and the United States Department of Agriculture are examples of this type of information. In addition, a considerable amount of similar material appears in farm papers, daily newspapers, and certain business service reports. Television and radio are examples of other media, which also disseminate economic information.

College, Experiment Station, and U. S. D. A. Publications: The Ohio Agricultural Extension Service regularly publishes monthly and weekly publications concerned with economic information. **Timely Economic Information for Ohio Farmers** is the monthly publication. "Econogram" is the weekly publication. Farmers may be placed on the mailing list for either or both of these publications by contacting their county agricultural extension agents.

The Ohio Agricultural Experiment Station publishes each year many bulletins and circulars dealing with specialized types of economic information. In addition, the experiment station publishes **Farm and Home Research** bi-monthly. Some of the articles in each issue of this publication are concerned with economic information.

Most U.S.D.A. publications are available for farmer use. Many are concerned with economic information. In a few cases circulation is restricted to colleges and other agricultural workers and leaders.

Farm Papers and Farm Magazines: This represents a very important source of economic information. **The Ohio Farmer, Farm Journal, Successful Farming, Capper's Farmer** and **Hoard's Dairyman** are examples of farm papers widely circulated in Ohio.

Business Service Reports and News Letters: The amount and type of economic information contained in this type of report varies from almost 100 percent to almost none.

Daily Newspapers: Some economic information is reported by all daily newspapers. Such information may be in the form of special articles, in syndicated columns, or the paper may use certain sections for this specific purpose.

Radio and Television: Radio and television stations disseminate some economic information. Nearly all farmers are aware of farm programs broadcast by their local radio and television stations.

Miscellaneous Sources: Farmers obtain economic information from various other sources, magazines, financial publications, meetings, and through personal contacts with friends and neighbors.

Basic Sources of Information: Most of the basic information used by farm papers and magazines, business service reports and news letters, daily newspapers, radio and television stations and other media is obtained from the same sources. These are the United States Department of Agriculture, agricultural colleges and agricultural experiment stations. The agricultural extension service is especially active in disseminating this type of information.

SOURCES OF ECONOMIC INFORMATION RECEIVED BY FARMERS

Farmers have access to all of these sources of economic information. Some farmers receive economic information from many more sources than others. For example, farm papers are widely distributed and approximately 84 percent of the farmers interviewed received **The Ohio Farmer** and 85 percent received the **Farm Journal**. Figure 1 indicates other farm papers are received by farmers in substantial numbers.

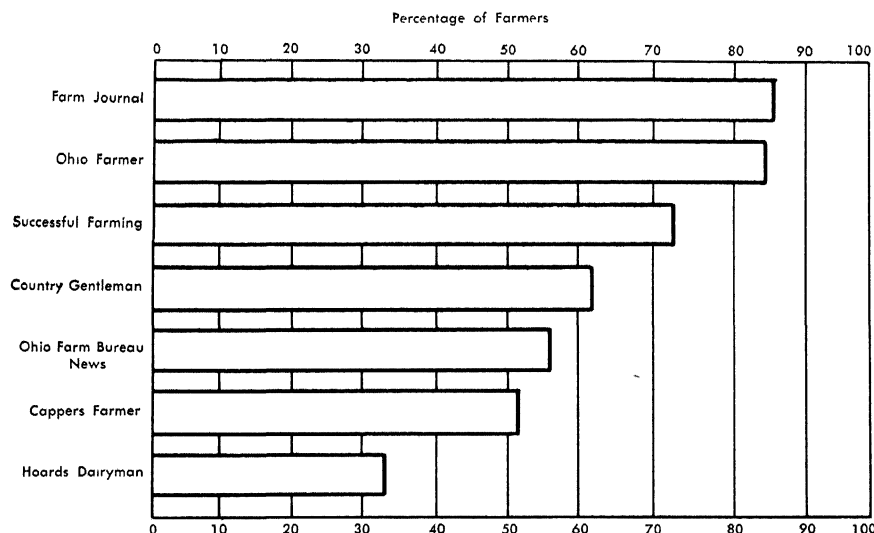


Fig. 1.—Farm papers regularly received by farmers, by percentage receiving each, all respondents, Ohio, winter 1954-1955.

Timely Economic Information for Ohio Farmers is received by approximately 10 percent of all Ohio farmers. "Econogram" is received by less than 10 percent and most experiment station publications are received by only relatively few farmers. Most U.S.D.A. publications are not widely distributed among farmers.

The most frequently mentioned business service report or business news letter was the "Sohio News Letter". It was received by slightly more than one-third of all farmers. "Doane's Agricultural Digest" was received by slightly less than 10 percent of all farmers.

Daily newspapers were received in about 90 percent of all homes and all farmers interviewed owned one or more radios. More than 75 percent owned a television.

SOURCES OF ECONOMIC INFORMATION USED BY FARMERS

Farmers were asked specific questions about expected future prices for the enterprise with which they were most concerned. If a farmer indicated he had heard or read something about a future price, he was then asked the source of his information. Farm papers and magazines were listed as this source much more often than were other publications or other disseminating media. Approximately two-thirds of all farmers listed farm papers as a source from which they obtained information. Radio and special news letters were each listed by about 20 percent and were listed second most often. Daily newspapers were listed by about 10 percent of all farmers. Television and agricultural college publications were each listed by fewer than five percent of the farmers interviewed.

SOURCES OF ECONOMIC INFORMATION PREFERRED BY FARMERS

Each farmer was asked the source from which he would prefer to receive information. Farm papers and magazines were still the most often mentioned source. However, fewer farmers preferred farm papers than rated farm papers as their most important source. About one-third listed farm papers as the source most preferred. Special news letters were mentioned second most often. Agricultural college publications were listed third most often and in considerably larger numbers than was true for the question on sources actually used. Approximately 15 percent of all farmers listed them as preferred sources. This indicates a degree of confidence in this source.

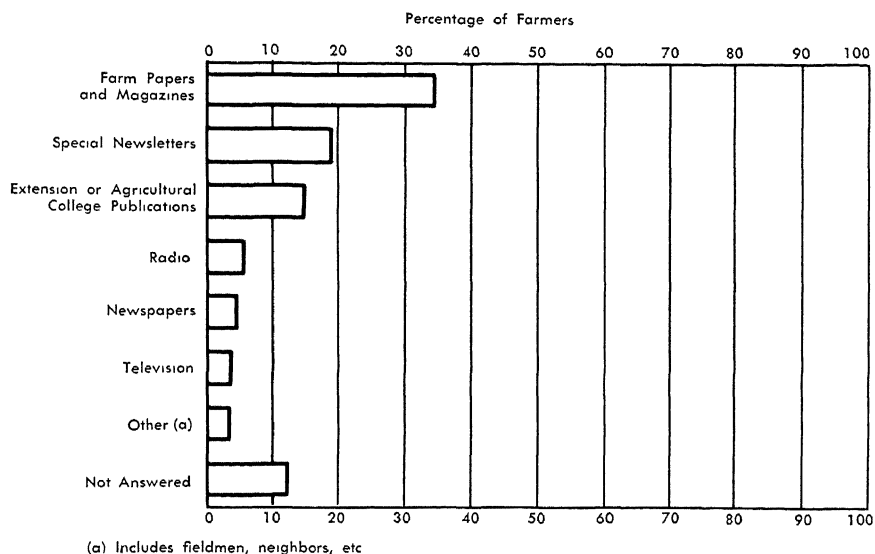


Fig. 2.—Source from which farmers would prefer to obtain economic information, all respondents, Ohio, winter 1954-1955.

SUMMARY OF SOURCES

There are ample sources of economic information available to keep farmers reasonably well informed about current price situations and short-run price expectations. In more recent years many farm magazines have been increasing the amount of economic information published. This study suggests this media could be further developed as a disseminator of economic information. The extension service and agricultural college might consider greater use of this media to reach more people.

There are several sources of economic information available to farmers which are not being used fully. This is indicated by the small percentage of farmers who are receiving business letters and service reports specifically designed to keep farmers up-to-date on economic information. Cost of some of these reports is relatively small.

FACTORS OTHER THAN PRICE INFLUENCING ENTERPRISE SIZE

Farmers were asked what changes they believed should be made in the size of their major enterprise to achieve maximum income. Most of the analysis dealt with the dairy, corn, and hog enterprises.

**TABLE 1.—Indicated Change in Size of Business Believed
Necessary for Maximum Farm Income, by Selected
Enterprises, Ohio, Winter 1954-1955**

| Change believed necessary for maximum income | Dairy Farmers | | Hog Farmers | | Corn Farmers | |
|--|---------------|------|-------------|------|--------------|------|
| | No. | Pct. | No. | Pct. | No. | Pct. |
| Larger | 96 | 51 | 71 | 36 | 29 | 36 |
| Smaller | 7 | 4 | 6 | 3 | 4 | 5 |
| Size just right | 67 | 35 | 91 | 47 | 34 | 42 |
| Don't know | 6 | 3 | 22 | 11 | 11 | 14 |
| Not answered | 14 | 7 | 0 | 3 | 2 | 3 |
| Total | 190 | 100 | 196 | 100 | 80 | 100 |

A much higher proportion of farmers believed their major enterprise should be increased than decreased. This is significant in agricultural policy. If short-run price decreases were to be effective in decreasing production, farmers likely would recognize this more quickly in their major enterprise than in a minor enterprise. Farm prices on the average had been decreasing for a period of three years at the time farmers responded to the question.

No more than five percent of the farmers whose major enterprise was dairy, hogs or corn indicated that size of business should be decreased for maximum income. Over one-half of the dairymen and over one-third of the hog and corn producers believed they should increase size of enterprise for maximum income.

Many farmers (perhaps without giving much thought to the economic reasons) may realize they must expand their farm operations or obtain part-time employment elsewhere if their labor is to remain fully employed as machinery replaces labor in the farming industry.

FACTORS INFLUENCING DAIRYMEN TO CHANGE ENTERPRISE SIZE

Only three percent of those whose major enterprise was dairy indicated they planned to have a smaller operation the following year while 44 percent planned to increase size. The major reason given by dairymen for changing size was "natural expansion." Typical answers within this category were "saving all heifers with aim of having larger herd," "heifers to freshen," "trying to increase," "trying to obtain goal set up in long-time plan." These answers do not reveal reasoning but they do indicate that pressures toward increasing size may have been dominant in the thinking of many farmers. The responses also re-emphasize that decisions of this kind are of a long-time nature. Nearly one-half of the total dairymen responding gave this type of reason.

The second largest group of dairymen who planned to change business size were those whose production resources had changed. Examples of this response were "son through school," "more help," and "more buildings." Nineteen percent of those responding gave this reason. Short-time price change likely was incidental in making this decision. The long-time economic implications can be seen, however.

Nine percent of the dairymen were planning to change their business size because of a different breeding program. Examples of this type of response were "more high-grade heifers" and "building new strain."

Milk prices and expected immediate income was mentioned by 12 percent of the group as a reason for expecting to change business size. Indications are that factors other than current price changes had a much greater influence on such decisions than did price changes.

FACTORS INFLUENCING SWINE PRODUCERS TO CHANGE ENTERPRISE SIZE

Relatively fewer swine producers than dairymen were planning to expand their enterprise size the following year. Thirty-five percent of swine producers gave this indication. Eight percent indicated they would produce fewer hogs in the following year.

The major reason given was "natural expansion," the same as dairymen, although a smaller percentage of the swine producers gave it as the principal cause (about one-fourth gave this reason). The other principal reason for swine producers changing size was "different facilities." A large factor in the decision of swine producers to change or not change was the amount of feed on hand. This was listed by 21 percent of those changing size. This reason, although economic in its broadest sense, has little to do with short-time price changes.

Eighty-two percent of those whose major enterprise was swine who were planning to change size of enterprise listed reasons other than price or expected price as the major cause. The other 18 percent mentioned price as a factor.

FACTORS INFLUENCING CORN PRODUCERS TO CHANGE ENTERPRISE SIZE

One-fourth of those whose major enterprise was corn planned to increase size of business the following year, and about one-fifth planned a smaller size. Reasons given for changing enterprise size among corn producers were considerably different from either of the livestock enterprises. One-third gave "rotation" as the major cause of difference in size in the two years. Differences of field size within the rotation made a particular acreage more desirable in a particular year.

The other main reason given for changing size was the price support program (which included acreage allotment). Although cross-compliance was not in effect, it had been mentioned as a possibility for the following year. Compliance with all allotments did not materialize but it could have been part of the reason why 27 percent of those planning to change gave "allotment program" as the major reason.

Other miscellaneous reasons included "cost of operation," and "planning to get more land." Short-time price variations did not play a large role in making decisions regarding changes in size of business on the three types of farms studied.

PRICE AS A FACTOR INFLUENCING ENTERPRISE SIZE

Farmers were asked how they would change their major enterprise size with a price change of as much as 25 percent. For most enterprises the change was given in terms of dollars rather than percent. For example, those whose major enterprise was dairy were asked how they would react to changes of one dollar per 100 pounds of milk.

EFFECT OF PRICE CHANGE UPON DAIRY HERD SIZE

About one-fourth of the dairymen indicated they would increase enterprise size if milk prices were increased one dollar per 100 pounds. Approximately one-fourth also indicated they would increase size if prices dropped by this amount.

Eighteen percent stated that if milk prices dropped one dollar per 100 pounds they would decrease business size, while only three percent would decrease size if price increased.

TABLE 2.—Indicated Action by Dairy Producers Relative to Herd Size If Milk Price Changed \$1.00 Per Hundredweight, Ohio, Winter 1954-1955

| Indicated Action | If milk price would rise \$1.00 per cwt. | | If milk price would drop \$1.00 per cwt. | |
|--------------------------|--|--------------------|--|--------------------|
| | Number of farmers | Percent of farmers | Number of farmers | Percent of farmers |
| Decrease business size | 6 | 3 | 34 | 18 |
| Increase business size | 48 | 25 | 43 | 23 |
| Not change business size | 123 | 65 | 103 | 54 |
| Not answered | 13 | 7 | 10 | 5 |
| Total | 190 | 100 | 190 | 100 |

Actually, there were more dairymen (23 percent) who indicated they would increase business size than would decrease it (18 percent) if milk prices dropped by as much as one dollar per 100 pounds. This is the opposite of expectations based upon economic logic.

These findings indicate that total milk production might be affected very little as a result of short-run prices dropping as much as one dollar per 100 pounds. On the other hand, short-run price increases of this much likely would increase production substantially.

Short-run price outlook statements likely would be of little value in materially adjusting production downward in the dairy business. This analysis does not show what would happen in the longer run. However, it might be reasonable to expect reactions over an extended period of depressed or inflated prices might be different.

EFFECT OF PRICE CHANGES UPON HERD SIZE OF SWINE PRODUCERS

Swine producers were asked how they would change their enterprise size if the price for hogs increased or decreased by four dollars per 100 pounds. As with the dairy business, a definite increase in production was indicated if hog prices were to increase by this amount (22 percent indicated they would increase herd size and only one percent indicated they would decrease.) Hog producers, however, would react somewhat differently from dairymen to a price drop. By a ratio of two to one more swine producers indicated they would decrease their size of business with a price drop than would increase it. This indicates expected lower prices likely would cause a definite reduction in hog

TABLE 3.—Indicated Action of Swine Producers Relative to Size of Herd if Prices Changed by \$4.00 per Hundredweight, Ohio, Winter 1954-1955

| Indicated Action | If hog prices would rise \$4.00 per cwt. | | If hog prices would drop \$4.00 per cwt. | |
|--------------------------|--|--------------------|--|--------------------|
| | Number of farmers | Percent of farmers | Number of farmers | Percent of farmers |
| Decrease business size | 2 | 1 | 36 | 18 |
| Increase business size | 44 | 22 | 18 | 9 |
| Not change business size | 145 | 74 | 138 | 71 |
| Not answered | 5 | 3 | 4 | 2 |
| Total | 196 | 100 | 196 | 100 |

supplies. However, swine producers would be more reluctant to decrease production with decreased prices than they would be to increase production with increased prices.

EFFECT OF PRICE CHANGE UPON CORN ACREAGE

Corn producers reacted to expected price changes similarly to dairy and swine producers in that about two-thirds stated they would not change enterprise size regardless of the direction prices move.

TABLE 4.—Indicated Action of Corn Producers Relative to Enterprise Size if Price Changed by 25 Percent, Ohio, Winter 1954-1955

| Indicated Action | If prices decreased 25 percent | | If prices increased 25 percent | |
|--------------------------|--------------------------------|--------------------|--------------------------------|--------------------|
| | Number of farmers | Percent of farmers | Number of farmers | Percent of farmers |
| Decrease business size | 19 | 24 | 5 | 6 |
| Increase business size | 6 | 7 | 20 | 25 |
| Not change business size | 51 | 64 | 51 | 64 |
| Not answered | 4 | 5 | 4 | 5 |
| Total | 80 | 100 | 80 | 100 |

Contrary to the attitude of swine and dairy producers, as many corn producers indicated they would decrease acreage if prices dropped as would increase acreage with a price rise. In each instance about one-fourth of the producers said they would change size in the same direction as the hypothetical price movement.

Why would corn producers be as willing to cut size of enterprise with a decrease in price as to increase size with an increase in price? A possible answer is that there are more alternative opportunities to corn production without disrupting an entire farm operation. Soybeans, for example, are a common substitute for corn. Growing soybeans would not greatly change requirements for any of the factors of production.

EFFECT OF PRICE CHANGE UPON ENTERPRISE SIZE OF ALL PRODUCERS

As shown in Table 5, in each instance about two-thirds of all producers indicated they would not change business size even if prices changed either way by 25 percent. This points up a major problem in outlook work. Many farmers are operating a type of business such that short-term price changes seem to affect production size very little, if any. Short-run price variations may cause some farmers to operate at a loss rather than change size of enterprise. This is especially true if alternative opportunities are not good or cannot be taken advantage of easily—or are unknown. Large fixed costs often may cause farmers to hesitate to change enterprise size. The decision not to change size often may be the most profitable one in the short run.

**TABLE 5.—Indicated Action of Farmers Relative to Enterprise Size
if Price Changed by 25 Percent, Ohio, Winter 1954-1955***

| Indicated Action | If price would rise by approximately 25 percent | | If price would drop by approximately 25 percent | |
|--------------------------|---|-----------------------|---|-----------------------|
| | Number of farmers | Percent of farmers | Number of farmers | Percent of farmers |
| Decrease business size | 14 | 3 | 115 | 21 |
| Increase business size | 130 | 23 | 71 | 13 |
| Not change business size | 378 | 68 | 343 | 62 |
| Not answered | 33 | 6 | 26 | 4 |
| Total | 555 | 100 | 555 | 100 |

*Average of all producers.

It is quite probable that if prices 25 percent higher (or lower) would cause a favorable (or unfavorable) situation over an extended period, more farmers could and would adjust to it. This type of long-run adjustment depreciates the value of shorter-term outlook statements, if they are not followed through with a specific longer-term analysis.

Farm policy implications are not only in terms of whether or not farm people do adjust to changes in price but also in which direction. Statements often have been made to the effect that, "I cannot afford to cut down my business size if prices drop because I must have the same size pay check to cover operating costs and living expenses." To what extent is this thinking prevalent?

According to the responses of the entire group of farmers, 21 percent indicated they would decrease business size, while 13 percent indicated they would increase size if prices dropped by 25 percent. Applying the test for significance of difference between percentages, it was found a difference this great would be very unlikely to occur by chance.

In the event of a price rise almost nine times as many people indicated they would increase as would decrease their business size. The actual total amount of increase or decrease might depend a great deal upon alternative opportunities, type of farming being carried on and other characteristics of the individual situation.

While almost nine times as many farmers would increase as would decrease with a price rise, only 1.5 times as many indicated they would decrease with a price drop of 25 percent.

One policy implication to this would be that total production more likely would be increased with expected price rises than decreased with expected price drops. Farmers appear to be more reluctant and often perhaps unable to adjust downward in the short run.

One might conclude that favorable short-run price outlook statements given to farmers might be more effective in causing increased production than unfavorable outlook statements would be in causing farmers to cut back on production (at least in the short run).

It would be assumed that each producer who increases adds as much to his business size as each producer who decreases takes from his business size.

DAIRY FARMER KNOWLEDGE OF AND REACTION TO PRICE EXPECTATIONS

Late in 1954 published outlook statements concerning the dairy business in 1955 were as follows: "Prices of dairy products to farmers probably will be near the equivalent of support levels during much of 1955. Prices may average about the same as during the last nine months of 1954 but slightly less than for the full year of 1954."¹ This same general forecast was found in more than one publication of that time.

Dairy farmers were asked early in 1955 how they expected milk prices to change during that year. Over one-half of the farmers indicated they believed prices would be the same as a year earlier. Another 12 percent believed prices would be lower. About two-thirds of those whose major enterprise was dairy generally believed milk prices would be the same as published statements had indicated.

**TABLE 6.—Milk Price Expectation for 1955, Dairy Producers,
Ohio, Winter 1954-1955**

| Milk price expected | Number of farmers | Percent of farmers |
|--------------------------|-------------------|--------------------|
| Higher than year earlier | 24 | 13 |
| Same both years | 105 | 55 |
| Lower than year earlier | 23 | 12 |
| No idea | 27 | 14 |
| Not answered | 11 | 6 |
| Total | 190 | 100 |

One-half of those dairymen who said they expected a higher milk price the following year indicated they planned to increase their herd size. Of those who expected lower prices, 35 percent planned to increase the size of their major enterprise. A difference this great may have happened by chance as often as 27 times out of 100. Only six out of 190 dairymen expected to decrease their size of herds even though a large majority believed prices would be the same or lower. It appears that short-run price change was not a major concern in this decision.

¹**Timely Economic Information for Ohio Farmers**, "Outlook Issue," The Ohio State University Extension Service, November, 1954.

SWINE FARMER KNOWLEDGE OF AND REACTION TO PRICE EXPECTATIONS

Published outlook statements had indicated that lower hog prices could be expected in 1955 than in 1954. About one-half of the swine producers expected a lower price that year. Another 28 percent expected prices to be the same and five percent believed prices would be higher.

Thirty-two percent of those who expected lower prices indicated they were planning to produce more hogs the next year while 33 percent of those who expected higher prices planned to increase their size of herds. This indicates that swine producers did not plan changes in enterprise size because of the short-run price outlook. It lends support to the argument that production adjustments often are caused by current prices rather than by "anticipated" prices.

CORN FARMER KNOWLEDGE OF AND REACTION TO PRICE EXPECTATIONS

Many corn producers had a general idea about what prices they could expect for their commodity the following year, but there seemed to be more price uncertainty than among either dairy or swine producers. Weather and disease often have more effect upon crop prospects than they do upon livestock production. Less specific price outlook information was available for corn than for most livestock enterprises.

Fifty-six percent of the corn producers who expected prices to be the same said they planned to plant the same acreage the following year. Of the 23 persons who definitely believed corn prices would be lower by harvesttime, four expected to plant more acreage, nine expected the same acreage, and one was undecided. This leaves nine (39 percent) who expected to plant less acreage or to adjust production in the same direction as the expected price.

In summary, most producers did have an opinion about prospective prices for their major commodity. In most instances considerably more than one-half of these opinions were in line with published price forecasts. However, there was little indication that such opinions about price in the short run caused many farmers to adjust their major enterprise size.

SECTION II

EFFECTS OF PROVIDING ADDED INFORMATION TO FARMERS

Those farmers who were given added information as part of phase two of the study will be called the "outlook" group. Those who were not supplied with added information will be called the "non-outlook" group. Farmers in both groups were asked questions about expected future prices for their major commodity.

EFFECT OF ADDED INFORMATION UPON PRICE EXPECTATIONS

Proportionately, there were twice as many in the "non-outlook" group who indicated they had heard nothing about what the future price of their major enterprise would be. The percentage was not large in either instance, however (seven percent for the "non-outlook" group and three percent for the "outlook" group). Also six percent of the "non-outlook" group stated they didn't remember what they had heard or read, compared with three percent for the "outlook" group who did not remember.

TABLE 7.—What Farmers Had Heard or Read Concerning Prices in Early 1956, by Groups of Farmers Who Had Received Added Information and Those Who Had Not, Ohio, February, 1956

| Type of group | What farmers heard or read | | | | | | Total responses | |
|-------------------|----------------------------|-----------------------|---------------------|----------------------|----------------|--------------|-----------------|------|
| | Nothing | Price would be higher | Price would be same | Price would be lower | Don't remember | Not answered | Number | Pct. |
| | Pct. | Pct. | Pct. | Pct. | Pct. | Pct. | | |
| Outlook | 3 | 17 | 26 | 50 | 3 | 1 | 315 | 100 |
| Non-outlook | 7 | 15 | 37 | 33 | 6 | 2 | 240 | 100 |
| Total and average | 5 | 16 | 30 | 43 | 5 | 1 | 555 | 100 |

A considerably larger percentage of the "outlook" group definitely stated they had heard that prices would be lower in the following year. A larger percentage of the "non-outlook" group answered that they had heard or read prices would be the same as the year before. This may mean those in the "outlook" group were more willing to state a definite position if one assumes that stating "the same" in some instances would be non-committal.

Farmers were asked to project their thinking six months further into the future regarding price expectations. About the same percentage of each group indicated they had no idea or did not answer. This accounted for less than one-fifth of the responses. About one-fourth of each group believed prices would be higher six months hence. Twenty-eight percent of the "outlook" group believed prices would be lower, while 20 percent of the "non-outlook" group believed prices would go in this direction. The chances of a difference this great coming from the same population are highly unlikely; yet, the difference was not great.

TABLE 8.—Price Expected by Farmers Later in 1956 Compared with 1955 by Groups of Farmers Who Received Added Information and Those Who Had Not, Ohio, February, 1956

| Type of group | Price comparison | | | | | Total responses | |
|-------------------|--------------------------------|------|-------------------------------|---------|--------------|-----------------|------|
| | Higher last six months of 1956 | Same | Lower last six months of 1956 | No idea | Not answered | Number | Pct. |
| | Pct. | Pct. | Pct. | Pct. | Pct. | | |
| Outlook | 25 | 30 | 28 | 10 | 7 | 315 | 100 |
| Non-outlook | 24 | 36 | 20 | 12 | 8 | 240 | 100 |
| Total and average | 24 | 33 | 24 | 11 | 8 | 555 | 100 |

Most outlook statements are projected less than one year into the future. If outlook work is to be made effective as a tool for adjusting enterprise size, efforts should be made to provide longer-run analysis.

SOURCES OF INFORMATION PREFERRED

Farm papers continued to be the most popular source for obtaining economic information. They were mentioned by 70 percent of the "outlook" group and by 58 percent of the "non-outlook" group as the major source of information. Even though the "outlook" group had more information available, proportionately more of them gave farm papers as the principal source of price information than was true for those in the "non-outlook" group.

Extension and agricultural college publications were mentioned more frequently by the "outlook" group than by the "non-outlook" group. Thirty percent of those in the "outlook" group mentioned this

TABLE 9.—Sources From Which Farmers Obtained Information, by Groups of Farmers Who Had Received Added Information and Those Who Had Not, Ohio, February, 1956

| Type of group | Sources of information | | | | | | | | | Total re-sponses |
|-------------------|------------------------|------|-------------|--|----------------------|-------------------|-----------|-------------------|--------|------------------|
| | Radio | T.V. | Farm papers | Extension or Agr. College publications | Special news-letters | Daily news-papers | Neighbors | Outlook meet-ings | Others | Number |
| | Pct. | Pct. | Pct. | Pct. | Pct. | Pct. | Pct. | Pct. | Pct. | |
| Outlook | 7 | 1 | 70 | 30 | 9 | 6 | —* | 7 | 8 | 265 |
| Non-outlook | 16 | 4 | 58 | 5 | 11 | 7 | 1 | 4 | 8 | 199 |
| Total and average | 11 | 2 | 65 | 19 | 10 | 6 | 1 | 5 | 8 | 464 |

*Less than one-half percent.

as a source. They were second to farm papers in number of times mentioned. Of all of those who mentioned extension and agricultural college publications, 89 percent were in the "outlook" group, while only 11 per cent were in the "non-outlook" group. This further emphasizes a major problem with distributing information through this medium; i.e., that college and extension service publications normally do not reach a very large percentage of Ohio farmers.

Special news letters and daily newspapers were mentioned as a source of information by about the same proportion of "outlook" and "non-outlook" respondents. Neither seems to be of very wide usage (ten percent for news letters and six percent for newspapers). Neighbors and fieldmen also played a very small role in informing both groups.

EFFECT OF ADDED INFORMATION UPON ENTERPRISE SIZE

After the "outlook" group had been provided with additional information, farmers in both groups were asked to anticipate the size of their major enterprises one year later. Twenty-two percent of those in the "outlook" group compared with 30 percent of those in the "non-outlook" group were planning to increase. This difference was not highly significant.

To check possible effects of familiarity with information upon production problems, a comparison was made between those who received **Timely Economic Information for Ohio Farmers**, "Econogram," and special news releases and those who did not.

Among the dairy producers the added information seemed to make no difference in attitude concerning production size. With both groups around one-third of the farmers had increased size of enterprise while a little less than 20 percent had decreased size. Slightly under 50 percent of each group had the same size each year.

For the swine producers, twenty-three percent of those who received the three publications planned to have more sows farrow the following spring. Of those not receiving the publications, 15 percent were increasing their number of sows for spring farrowing. The difference is not highly significant.

Two factors perhaps should be re-emphasized. First, both groups had access to information other than those publications listed which may have influenced their decisions. Second, many of the group which received added publications did so for only one year and did not specifically request the publications and therefore may have had little interest in them.

In summary, the evidence indicates that only slight effect was obtained by providing farmers with added information.

Even though farmers believe price will react in a certain way, they frequently are quite hesitant to shift production patterns, especially in certain enterprises. One year is too short a time to cause a maximum number of farmers to change their attitudes toward the use of economic information. Further study will be needed to determine whether added information over longer periods of time would help farmers better make short-run decisions.

The actual difference in the amount of economic information available to the two groups was small.

FARMER REACTION TO CONTROLS OF PRODUCTION

Some farmers had experienced limited controls in the form of acreage allotments and marketing quotas. Others probably had had little or no experience with them. Consequently various interpretations likely were placed by farmers upon the question, "Would you be in favor of effective controls on the production of your major commodity if you knew this would result in higher prices?"

**TABLE 10.—Farmer Attitude Toward Effective Controls, by
Type of Enterprise, Ohio, February, 1956**

| Type of enterprise | Attitude Toward Controls | | | | Total Responses | |
|--------------------|--------------------------|------------------|---------------|-----------------|-----------------|------|
| | Favor- able | Unfavor- able | Don't know | Not answered | Number | Pct. |
| | Pct. | Pct. | Pct. | Pct. | | |
| Dairy | 25 | 50 | 18 | 7 | 190 | 100 |
| Poultry | 14 | 57 | 29 | 0 | 21 | 100 |
| Hogs | 34 | 45 | 19 | 2 | 196 | 100 |
| Beef | 15 | 64 | 19 | 2 | 54 | 100 |
| Corn | 42 | 40 | 15 | 3 | 80 | 100 |
| Soybeans | 21 | 58 | 21 | 0 | 14 | 100 |
| Total and average | 29 | 50 | 18 | 3 | 555 | 100 |

Most farmers indicated that they did not favor applying effective controls even though farm prices in general at the time were at a very low level. Beef producers seemed most against controlling production in order to attain higher prices. Following the beef enterprise the order was as follows: soybeans, poultry, dairy, hog, and corn.

There is some evidence that reaction to such a question is in an inverse relationship to prices at that time. When the question was asked, corn and hog producers had just passed through an extremely low price period. This may have influenced their thinking.

Dairy prices had increased slightly and egg and soybean prices were at higher levels than they had been just previously.

Still more of every group were against controls than were for them, except corn. Corn producers had been exposed to limited controls, although perhaps not effective controls.

Relatively fewer of those favoring controls were farming between 100 and 179 acres. The average family-size farm in Ohio is within this acreage range.

Proportionately more farm owners than tenants favored controls. This may at least have been partially a result of the increased economic pressures involved in owning a farm not free of debt. The difference in reaction was not great.